AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

Claim 1 (Currently Amended): A method of inhibiting cellular proliferation comprising inhibiting the activity or reducing the amount of a proliferation-required polypeptide comprising the amino acid sequence ~~consisting~~ of SEQ ID NO: 325 or an amino acid sequence selected from the group consisting of an amino acid sequence having at least 40% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 60% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 70% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 80% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 90% amino acid identity to SEQ ID NO: 325 and an amino acid sequence having at least 95% amino acid identity to SEQ ID NO: 325, or inhibiting the activity or reducing the amount of a nucleic acid encoding said polypeptide, thereby inhibiting cellular proliferation ~~wherein inhibiting the activity or reducing the amount of a polypeptide comprising the amino acid sequence consisting of SEQ ID NO: 325 or inhibiting the activity or reducing the amount of a nucleic acid encoding said polypeptide inhibits cellular proliferation~~.

Claim 2 Cancelled

Claim 3 (Original): The method of Claim 1, wherein the cell in which proliferation is inhibited is *Escherichia coli*.

Claim 4 (Currently Amended): A method for inhibiting cellular proliferation comprising contacting a cell with a compound which inhibits the activity or reduces the amount of a proliferation-required polypeptide comprising the amino acid sequence ~~consisting~~ of SEQ ID NO: 325 or an amino acid sequence selected from the group consisting of an amino acid sequence having at least 40% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 60% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 70% amino acid identity to SEQ ID NO: 325, an amino acid sequence

having at least 80% amino acid identity to SEQ ID NO: 325, an amino acid sequence having at least 90% amino acid identity to SEQ ID NO: 325 and an amino acid sequence having at least 95% amino acid identity to SEQ ID NO: 325, or which inhibits the activity or reduces the amount of a nucleic acid ~~comprising a nucleotide sequence~~ encoding said polypeptide, thereby inhibiting proliferation ~~wherein contacting said cell with said compound inhibits cellular proliferation~~.

Claim 5 (Original): The method of Claim 4, wherein said compound is an antisense nucleic acid.

Claim 6 (Previously Presented): The method of Claim 5, wherein said compound is an antisense nucleic acid comprising a sequence selected from the group consisting of SEQ ID NOs: 459 and 460, or a proliferation-inhibiting portion thereof.

Claim 7 (Previously Presented): The method of Claim 6, wherein said proliferation inhibiting portion of one of SEQ ID NOs: 459 or 460 is a fragment comprising at least 10, at least 20, at least 25, at least 30, at least 50 or more than 50 consecutive nucleotides of one of SEQ ID NOs: 459 or 460.

Claim 8 (Original): The method of Claim 4, wherein said compound is a triple helix oligonucleotide.

Claim 9 Cancelled

Claim 10 (Original): The method of Claim 4, wherein the cell in which proliferation is inhibited is *Escherichia coli.*

Claim 11 (Currently Amended): A method for inhibiting cellular proliferation comprising contacting a cell with a compound with activity against a proliferation-required gene ~~corresponding to~~ comprising the nucleotide sequence of SEQ ID NO: 165 or a nucleotide sequence selected from the group consisting of a nucleotide sequence having at least 40% nucleotide identity to SEQ ID NO: 165, a nucleotide sequence having at least 60% nucleotide identity to SEQ ID NO: 165, a nucleotide sequence having at least 70% nucleotide identity to SEQ ID NO: 165, a nucleotide sequence having at least 80% nucleotide identity to SEQ ID NO: 165, a nucleotide sequence having at least 90% nucleotide identity to SEQ ID NO: 165 and a nucleotide sequence having at least 95% nucleotide identity to SEQ ID NO: 165, or

with activity against the product of said gene, ~~wherein contacting said cell with said compound inhibits~~ thereby inhibiting cellular proliferation.

Claim 12 (Original): The method of Claim 11, wherein said compound is an antisense nucleic acid.

Claim 13 (Previously Presented): The method of Claim 12, wherein said compound is an antisense oligonucleotide comprising a sequence selected from the group consisting of SEQ ID NOs: 459 and 460, or a proliferation-inhibiting portion thereof.

Claim 14 (Previously Presented): The method of Claim 13, wherein said proliferation inhibiting portion of one of SEQ ID NOs: 459 or 460 is a fragment comprising at least 10, at least 20, at least 25, at least 30, at least 50 or more than 50 consecutive nucleotides of one of SEQ ID NOs: 459 or 460.

Claim 15 (Original): The method of Claim 11, wherein said compound is a triple helix oligonucleotide.

Claim 16 Cancelled

Claim 17 (Original): The method of Claim 11, wherein the cell in which proliferation is inhibited is *Escherichia coli.*

Claim 18 (Previously Presented): The method of Claim 1, wherein the cell in which proliferation is inhibited is selected from the group consisting of *Escherichia coli, Pseudomonas aeruginosa, Enterobacter cloacae, Helicobacter pylori, Neisseria gonorrhoeae, Haemophilus influenzae, Salmonella typhimurium, Salmonella typhi, Salmonella paratyphi, Salmonella cholerasuis, Klebsiella pneumoniae, Yersinia pestis,* and *Campylobacter jejuni* or any species falling within the genera of any of the above species.

Claim 19 (Previously Presented): The method of Claim 4, wherein the cell in which proliferation is inhibited is selected from the group consisting of *Escherichia coli, Pseudomonas aeruginosa, Enterobacter cloacae, Helicobacter pylori, Neisseria gonorrhoeae, Haemophilus influenzae, Salmonella typhimurium, Salmonella typhi, Salmonella paratyphi, Salmonella cholerasuis, Klebsiella pneumoniae, Yersinia pestis,* and *Campylobacter jejuni* or any species falling within the genera of any of the above species.

Claim 20 (Previously Presented): The method of Claim 11, wherein the cell in which proliferation is inhibited is selected from the group consisting of *Escherichia coli,*

Pseudomonas aeruginosa, Enterobacter cloacae, Helicobacter pylori, Neisseria gonorrhoeae, Haemophilus influenzae, Salmonella typhimurium, Salmonella typhi, Salmonella paratyphi, Salmonella cholerasuis, Klebsiella pneumoniae, Yersinia pestis, and *Campylobacter jejuni* or any species falling within the genera of any of the above species.

Claim 21 (New): The method of Claim 1, wherein said polypeptide possesses an ADP heptose synthase activity.

Claim 22 (New): The method of Claim 4, wherein said polypeptide possesses an ADP heptose synthase activity.

Claim 23 (New): The method of Claim 11, wherein said gene encodes a polypeptide that possesses an ADP heptose synthase activity.